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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,178	11/25/2003	Tsunchiko Watanabe	HIRA.0131	4338
38327	7590	12/29/2006		
REED SMITH LLP 3110 FAIRVIEW PARK DRIVE, SUITE 1400 FALLS CHURCH, VA 22042			EXAMINER LE, MIRANDA	
			ART UNIT 2167	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/29/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/720,178		TSUNEHIKO WATANABE	
	Examiner		Art Unit	
	Miranda Le		2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment, filed 10/10/2006.
2. Claims 8-13 are pending in this application. Claim 8 is independent claims. In the Amendment, claims 8-13 have been added, and claims 1-7 have been cancelled. This action is made Final.

Drawings

3. The drawings were received on 10/10/06. These drawings are acceptable.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 8 lacks the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. Applicant has invoked 112, 6th paragraph by using means plus function language, however, each of the means is reasonably interpreted in view of the specification as just software, the claimed system is not limited to embodiments which include the hardware necessary to enable any underlying functionality to be realized, instead being software per se.

Claims 9-13 incorporate the deficiencies of claim 8, and do not add tangibility to the claimed subject matter, they are likewise rejected.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 8-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Murray et al. (US Pub. No. 20020168664).

Murray anticipated independent claim 1 by the following:

As per claim 8, Murray teaches a data search system comprising a data center for distributing data and a user's facility for receiving the data distributed from the data center to use the data for a data search, the data center including:

means (i.e. Information from literature databases relating to a particular set of DNA sequences is retrieved, [0011]) for downloading data from a plurality of databases (databases 1,

2, 3, 4, and 17 in Fig. 1) (*i.e. information may be extracted from one of many literature databases, for example MEDLINE, the U.S.P.T.O. and W.I.P.O. patent database, [0013]*);

means for generating link (*i.e. pathway*) information among the plurality of databases, based on the downloaded data (*i.e. The extracted information can pertain to a pathway in which a gene functions, or information about interactions between different genes on a list, [0013]*);

means for generating detailed information (*i.e. step 320, 325 in Fig. 10*) of each data entry (*i.e. Gen A, B, and C in Fig. 9*), based on the downloaded data (*See Figs. 9, 10*);

means for generating data for homology search of said each data entry (*i.e. step 310 in Fig. 10*), based on the downloaded data (*See Figs. 9, 10*);

a route table (*i.e. table 480, 490 in Fig. 13*) defining a data search rule for searching data of interest in the databases (*i.e. construct a pathway model for all genes on list, step 359 in Fig. 10*); and

means for distributing to the user's facility the link information (*Fig. 12*), the detailed information of said each data entry, the data for homology search, and the route table (*i.e. step 362, 363 in Fig. 11*), and

the user's facility including (*Fig. 12*):

means for conducting the data search using the link information, the detailed information of said each data entry, the data for homology search, and the route table distributed from the data center (*i.e. The information stored in the database may be accessed or queried by users interested in identifying candidate genes, [0146]*).

As per claim 9, Murray teaches the data search system according to claim 8, wherein the means for generating link information generates the link information by extracting from the downloaded data correspondence between said each data entry in the plurality of databases to associate said each data entry (*i.e. Information from literature databases relating to a particular set of DNA sequences is retrieved, and using information extraction methods the literature is processed, [0011]*).

As per claim 10, Murray teaches the data search system according to claim 8, wherein the means for generating detailed information of each data entry generates the detailed information of said each data entry by extracting from the downloaded data ID data and detailed descriptions corresponding to said each data entry (*i.e. Information from literature databases relating to a particular set of DNA sequences is retrieved, and using information extraction methods the literature is processed, [0011]*).

As per claim 11, Murray teaches the data search system according to claim 8, wherein the means for generating data for homology search of said each data entry generates the data for homology search of said each data entry by extracting from the downloaded data ID data and sequence data corresponding to said each data entry (*i.e. Information from literature databases relating to a particular set of DNA sequences is retrieved, and using information extraction methods the literature is processed, [0011]*).

As per claim 12, Murray teaches the data search system according to claim 8, wherein the route table stores the data search rule which restricts searches only along links following an origin of said data of interest as defined therein (*i.e. Internal databases are typically maintained in confidentiality from the public through a firewall, [0043]*).

As per claim 13, Murray teaches the data search system according to claim 8, wherein the means for conduct the data search in the user's facility conducts the data search without following links of routes which are not defined in the search rule following an origin of said data of interest, even if there is other link information between said each data entry defined in the route table (*i.e. The information stored in the database may be accessed or queried by users interested in identifying candidate genes, [0146]*).

Response to Arguments

7. Applicant's arguments regarding neither Yang, Wilbanks teaches cancelled claim 7 have been considered, but are moot in view of the new ground(s) of rejection with respect to new added claims 8-13.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

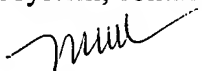
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Miranda Le
December 22, 2006



JOHN COTTINGHAM
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